



first year of operation. More recently, the Index has remained consistently well below the 50-mark. The last time it exceeded 50 in Toronto was on April 13, 1971 (reading: 52).

Air Quality, Put the emphasis on quality, the Ministry of the Environ-

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INDEX

EFFECTS

ACTION

0-32

acceptable for everyone's health

387-385

32

If weather conditions likely to persist, major sources of pollution advised to repare to reduce operations

FIRST ALERT

Mandatory curtailment of major sources of pollution

58

People with severe espiratory diseases may have some increase of symptoms

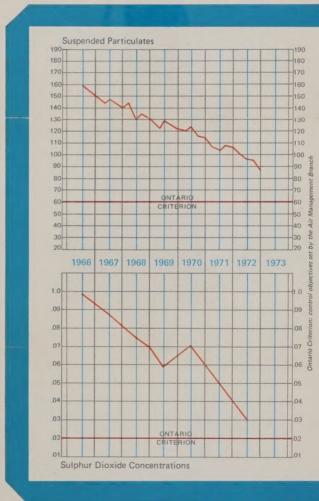
75

SECOND ALERT urther shutdown of operatio

100

Mild effects on healthy people Severe effects possible for

All sources of pollution not essential to public health or safety may be





Ministry of the Environment Hon, James A.C. Auld, Minister Everett Biggs, Deputy Minister

Published by Information Services Branch 135 St. Clair Avenue West, Suite 400 Toronto, Ontario M4V 1P5 It keeps watch round the clock on air pollution levels in major urban and industrial areas across the province.

A certain amount of air pollution occurs naturally. People add to it by simple acts of working, living, travelling. In a complex, technology-based society such as ours there will always be some air pollution, but the Ministry of the Environment has established acceptable levels (levels at which no ill effects on man's health or his environment are likely to occur), and its Air Management Branch sees to it that these are maintained.

One of the most effective tools it uses to achieve this is the Air Pollution Index.

The Index gives warning of air pollution build-up. As this occurs, steps are taken to reduce it. Declining Index levels reflect how effective these are — anyone can observe this, as Index levels are published and broadcast frequently throughout the day.

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Sophisticated instrumentation continuously monitors air quality at a number of locations throughout Ontario for sulphur dioxide and suspended particles — the two major air pollutants which effect human health. The resulting measurements are computed hourly as a 24-hour average, evaluated and combined mathematically, and the degree of pollution expressed as a number.

When the Index reaches a reading of 32 and is expected to continue to rise, an alert system swings into action. Owners or operators of larger sources of air pollution, who can help to correct the situation most effectively, are notified and asked to cut down their contributions. They are also advised that they may be ordered to cut back if the level continues to rise.

If they cooperate, the Index should drop. At least the rate of increase will slow down.

Should the Index level reach 50, Ontario's Environment Minister may order reductions in the operations of the major contributors. Failure to comply with these Minister's Orders leaves the polluter liable to be charged, with stiff fines on conviction, as set out in Ontario's Environmental Protection Act, 1971.

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When the air is stagnant, or there is a temperature inversion (condition which prevents pollution from dispersing into the higher atmosphere), the Index usually climbs to higher levels.

At other times, winds may force pollutants from elevated chimney sources to ground level. If these conditions persist, a high Index may also result.

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Ontario's Air Pollution Index is designed with a large margin of safety. During the week of the 1962 Grey Cup Game, the famous 'Fog Bowl' in Toronto, the Air Pollution Index would have soared to a reading of 155 — yet there was no recorded increase in hospital admissions of people with respiratory complaints during that period. There was no Index then. This figure was calculated from data recorded at the time. The Index was first introduced in 1970, in Toronto. It has since expanded to other Ontario communities (Hamilton, Sudbury and Windsor), and will continue to expand. The Ministry's program for reducing pollution output at lower levels means we are unlikely to experience readings as high as those of the 'Fog Bowl' ever again. In fact, levels of sulphur dioxide and particulate matter, as reflected by these readings, have declined steadily in recent years (see charts).

The highest recorded level in Toronto was 56 during the Index's